



8mm

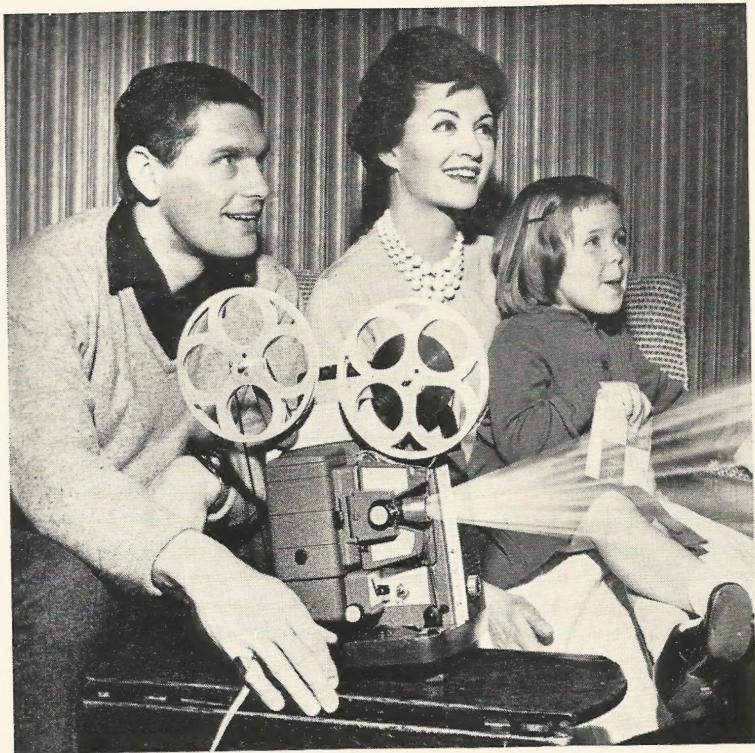
guide to movie making

Ninth Edition

by
**Stanley
Dixon**

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No. 7



GUIDE TO 8 mm. MOVIE MAKING

by Stanley Dixon

SOON you'll be telling everyone that making movies is definitely the most thrilling and satisfying form of photography. Haven't I been saying so for years?

Now the important thing to grasp at the outset—and which I must impress upon you—is that merely photographing moving subjects with a cine camera will not by itself make a good film. It is essential that a vivid and purposeful connection exists between successive scenes. In short, every film must

tell a story of some sort, and, if you make that a definite rule, you'll find it easy to produce wonderfully interesting and often very amusing films of the many facets of your family life, your work, your holidays and travels, and even more ambitious subjects such as short film plays.

FILM SIZE. First let me answer a question which is probably in the front of your mind: why is this book only about 8 mm. movies?

For professionally-made films, such as you see at a cinema, 35 mm. film is used; film and apparatus is also available in the 16 mm. and 9.5 mm. sizes. As all movie pictures are enlarged considerably when projected upon a screen, it is obvious that a big negative will yield a better quality of picture. Therefore, in commercial cinemas, where an enormous screen is necessary, it is imperative to use the largest practical size of film.

But if your pictures are going to be projected at home, your screen will not be anything like the size of a cinema screen; most likely it won't be more than 4 ft. wide. And for reproduction of this order, 8 mm. film is completely satisfactory and has many advantages.

This 8 mm. stock is the least expensive of all cine film, and processing is always included in the initial cost.

Cine film differs from that used in still photography because, after processing, it is not a negative but a positive, i.e. one in which white objects appear on the film as white, and black objects as black. The film chosen by you is supplied either on a spool or magazine. Several different kinds of film are available, choice of which for different purposes is explained later in this booklet.

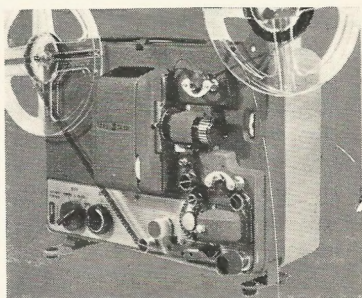
The piece of film carrying your pictures measures 8 mm. wide, but there are two types of film stock, one of which is just a simple strip called single-run film. The other, in more general use, is known as double-8 film because it is 16 mm. wide and is run through the camera twice giving two parallel chains of pictures. After development by the manufacturers it is slit along the middle to form two single-8 lengths of film.

The useable run of film in most

packings is 25 ft., so that out of one spool of double-8 film you get 50 ft. of single-8 pictures. At the beginning and end of the film are short extra pieces of "leader" film four feet long so that you can load and unload your camera in daylight. These pieces of film of course are fogged, and later are cut off during the processing operations. At normal speed, 25 ft. of film represents a total of about 4 minutes of shooting time.

ADDING SOUND

Any 8 mm. films used in any cine cameras can be striped with a magnetic sound track. Lip-synchronised sound movies can then be made, the commentary and special effects being recorded whilst viewing the film. No longer are sound movies a rich man's hobby; with the recent introduction of the TOEI sound projector and recording unit this aspect of 8 mm. photography is rapidly increasing in popularity.



Films really come to life when properly synchronised sound is added. The TOEI sound projector is remarkable not only for the quality of reproduction but also for the exceptionally low price of under £100. Another feature of this projector is compactness, the speaker unit forms part of the case and the entire outfit is easily carried.

EXAMINE THE "WORKS". It may sound trite, but the first thing you must do is to get to know your camera thoroughly. No two designs are alike, but a comprehensive instruction booklet accompanies every new camera bought from Dixons, and you are strongly advised to go through this booklet carefully with the camera in front of you, until you become completely familiar with the details of loading, unloading, and operation of the controls.

Different cameras have all man-

modern marvels

Today's budding moviemaker starts with a thousand advantages compared to a few years ago. The many new aids to better and simpler photography, such as automatic exposure, zoom lenses and reflex focusing, have taken most of the headaches out of cinematography.

Some cameras measure the light and actually set the shutter automatically. Others have a pointer which has to be lined up with a needle to make the correct exposure setting.

However simple or complicated your camera you should read this booklet thoroughly. It's still the 'man behind the wheel' that counts in filming. You will get more fun from photography when you are getting the most from your camera.

CINE LENSES. In still photography the focal length of a normal lens on most cameras is about equal to the diagonal of the picture size. But in cine cameras the focal length of the lens normally is twice that value, so the angle of view is only half as big as that of a still camera.

In the simplest cine cameras the lens is of the fixed-focus variety, similar

ner of refinements, but the basic construction is the same. Most cameras are driven by clockwork motors, although some well-known amateur cameras are operated by a small electric dry battery which obviates the need for re-winding. When the starter button or trigger is depressed the motor operates the film feed mechanism, consisting of a sprocket wheel and claw, thus advancing the film in regular steps through the "gate"; it also rotates the shutter and turns the take-up spool.

to that of the box camera. Better cameras have lenses of the focusing type, as on most rollfilm cameras, and may have provision for changing the normal lens to a wide angle lens which takes in a much wider picture, or a long-focus or telephoto lens which gives a larger picture of more distant objects.

ZOOMING. Many reasonably-priced cine cameras are now equipped with a multi-purpose 'zoom' lens. With multiple elements this lens actually serves as many different lenses, for it is readily adjustable to a variety of focal lengths that give wide angle, normal and telephoto fields of view. There are all kinds of cameras now equipped with these amazing lenses, some are electrically powered for the operation of 'zooming' and others are manually operated.

At this point we must stress that a Zoom lens is not intended to make every shot zoom in and out. The most useful aspect is that from any given position, you can choose exactly the focal length needed to fill the frame of your picture.

ACCESSORIES NEEDED. Although you may hand-hold your camera, it is essential to use a good tripod for much of your cine photography. Unless the camera is quite firm you will find that enjoyment of many otherwise perfect films will be ruined by short runs in which the picture jumps up and down on the screen, due to camera shake when taking. A tripod is essential when using long-focus or telephoto lenses.

Choose your tripod carefully. The cine type of tripod needs to be stronger than that used for still cameras, and preferably should have no more than three sections. The cine type of rotatable platform is also different from the ball and socket head used with still cameras. A pan and tilt head is moved by a "joy stick" projecting behind the camera, and can be swivelled in any direction or angle, then locked by a turn of the operating handle.

CLOSE-UP LENSES. The amateur cine photographer's kit should also include a set of supplementary lenses which, when placed over the camera lens, enable you to focus down to take sharp pictures, such as titles, as close as 18, 12 or even 9 inches.

When using a close-up lens the camera lens is set in accordance with the instruction table, telling you the exact distance of objects which will be in sharp focus. The depth of field when using a supplementary lens is very small, so that the distance of the subject must be measured accurately.

CHOICE OF FILM. Most 8 mm. movie makers use colour film for all their films. After all, it costs exactly the same as black and white and is just as easy to use. There are



Typical of the many reasonably-priced automatic cine cameras, the Crown 201 has Power Zooming with a full 10-30 mm. zoom range.

two types of colour film and the most popular is the "Daylight" one. This will give perfect movies of all outdoor scenes. It cannot, however, be used indoors, where the correct choice is "Type A" film.

"Type A" is used with the popular Photoflood bulbs which easily produce the bright light necessary for colour filming. Remember to use the proper film for the light sources you are using. Do not mix daylight and artificial light in the same scene. If you wish to film indoors without extra lights, black and white film speeds of 200 A.S.A. are available.

COLOUR FILTERS. These come under two headings, those for black and white and those for colour films.

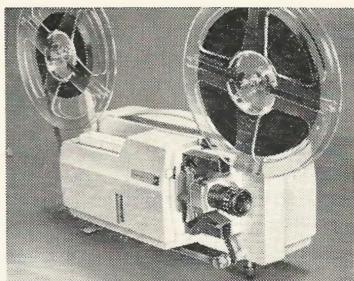
Colour films are designed (or balanced, as it is called) for a light source of one particular kind. This is usually Daylight (Type D) or Photoflood (Type A). If you ever use the wrong one, by accident, you will soon see why the difference is important. One would be impossibly blue all over and the other a peculiar orange! So you must

choose the film to suit the light. There is one trick, however, that permits you, if you want, to use the same film indoors and out. Load your camera with Type A film. Indoors, using Photofloods, you will need no filter. When you are shooting with Daylight, slip a "Type A to D Conversion" filter in front of your lens. Remember to take it off when you go back to Photofloods again! The exposure table packaged with your film will tell you which speed rating or exposure to use in each circumstance. The only other filter needed is a Haze or Ultra Violet filter. This is quite colourless but is useful in distant beach and mountain scenes, as it prevents an exaggerated blue mistiness in the scene.

out with your camera

LENGTH OF SCENES. Your film will consist of a succession of short sequences or scenes all illustrating your story. Most beginners make the mistake of unduly prolonging each scene. Therefore, keep your scenes short and save film. A general but not invariable rule is to film each scene or different camera angle for no longer than 10 seconds.

Long shots of scenery or surroundings serve to establish the location for subsequent closer action, but distant detail does not come out too well on 8 mm. film, so don't overdo the long shots. The majority of your scenes should be medium shots at a distance of 10-20 feet which gives you ample depth of field thus relieving you of



The Magnon 800 projector is extremely compact and features self-threading, together with "keyboard" push button controls. An f/1.5 15-25 mm. zoom lens makes this projector a very attractive buy.

any focusing problems, but intersperse them with lots of intimate close-ups.

Experience will soon prove to you that close-ups at 6-8 ft. are quite effective if only 6-7 seconds long, and portraits taken at say, 3 ft. need merely flash on the screen for about 4 seconds at the most.

Varied interest is also achieved by continual alteration of the angle of shooting. Low and high angle shots, which reveal things and people from a different perspective, can add excitement to the more familiar viewing angles.

PANNING. Derived from the word panorama, "panning" means a slow swinging of the camera to follow the action of a moving object, or to give a panoramic effect by slowly sweeping across a wider field of view than could be filmed with a stationary camera.

Fast panning with the camera hand-held is always a failure. The camera movement must be slow and deliberate, preferably from a firm support, otherwise your audience will merely see on the screen an object lurching to and fro. For your first attempt at panning I advise you to use a tripod and keep the camera at an even level while turning it slowly at a uniform rate. Make sure that the whole scene is of approximately the same brightness. Come to rest on the most important object in the scene and hold it for a few seconds longer, thus emphasizing its importance. A complete panning need last no longer than 12 seconds, using a lens of normal focal length.

A viewer finds it most natural to look from left to right. Make most of your panning shots in that direction. Never swing the camera in a direction opposite to the movement of your subject; always follow the movement you are filming. And remember, if you *must* indulge in panning with the camera hand-held, the whole body should swing round with the camera.

TRACKING SHOTS. From the earliest days of the cinema, professional cinematographers mounted their cameras on elaborate trolleys which enabled them to produce the impression on the screen of approaching or receding from a subject. The most frequent use of tracking is first to show a general view and gradually to come closer to some object of interest, thus achieving a gradual transition from long to medium shot and finally to a close-up. Until the coming of the Zoom lens this has presented difficulties for an amateur without special equipment.

FADES IN AND OUT. Without fading, your successive scenes will all begin and end abruptly, which is nerve-racking to follow on the screen. "Fades" create little pauses in the transition which makes it easier for the viewer. A "fade-in" is the gradual appearance of a scene out of darkness, while a "fade-out" is its slow disappearance. Opening and ending titles, for instance, should invariably be faded in or out. A "mix" or "dissolve" is the gradual merging of one picture into the next.

A fade-out can easily be produced merely by gradually closing the lens aperture. Similarly, a fade-in is achieved by starting with a very small aperture and gradually opening it to normal exposure position. A movement either way of about three stops is necessary to produce an effective fade.

VARYING THE SPEED. A camera with provision for variable filming speed gives you the opportunity to introduce many interesting variations. Nearly all movements involving gracefulness or art are improved by showing them in slow motion. The scene is taken at say 32 frames a second but screened at the usual 16. By filming at 8 frames a second, action can apparently be speeded up. A street scene, for instance, is thereby transformed into a hub of frenzied activity. Slow filming can also be used to give extra exposure—occasionally necessary when using colour film.

USING COLOUR FILM. One of the advantages of using 8 mm. cine equipment is that colour films cost no more than black and white. In either case the processing is included in the film price. In fact, a colour movie sequence is actually

cheaper than one 35 mm. colour slide.

You will find, too, that the colour seems to benefit the naturalness of your films. It is most refreshing to recall bright summer colours when you show holiday films at Christmas.

Technical details of the films vary, but all you need remember is that there is a daylight type of colour film for use in daylight, and a second type of colour film for use in artificial light.

For your first attempts in colour movies, don't include too many long shots; you will find that medium and close-up shots are much easier. It is also preferable to take your first colour sequences in hazy, not brilliant sunshine. Colour films are not at their best with violently strong contrasts, and you need a light composed of the normal balance of colours. Any departure from this normal composition of the light, or "colour temperature", which occurs when there is an excess of any particular colour in the lighting, can produce unnatural results in your pictures.

Carry your camera with you wherever you can. Colour is everywhere and filming will increase

your powers of observation. Most people go around with their eyes shut. With your cameraman's eye you will begin to see contrasts, hues and patterns that the others miss. Capture them with your cine camera and use them as back-grounds for your next family epic!

CHILD LIFE. If you want to start right at the very beginning, get some shots say at the maternity home, of mother, the nurses, and your screaming, lobster-faced, little darling. Follow a few days later with serene pictures of mother and child. Record the christening, the first ride in the pram, the ceremony of being weighed, first attempts at crawling over the carpet, feeding time, bed time and, not the least, bath time.

After you've shot the first birthday party, film the growing child's many reactions to animals, toys, dolls, books, games. Later you add all the adventures of learning to ride a bicycle, sports and school life.

If you make a couple of hundred feet of film every three or six months of a child's life, you soon have a really wonderful record.



There are many editors to choose from when you shop at Dixons. It is tremendous fun to rearrange the sequence of events, cut out scenes you don't want, etc. The editor illustrated is the Prinz Proofmaster a table top model that is very easy to use and which is so compact that it may be easily taken with you anywhere.

holidays and travel

Filming all the fun of the holidays is probably the other most popular amateur subject. Avoid "picture postcard" shots and, instead, go all out after the humorous incidents of the holiday. After all, views of localities, scenery, old buildings and the like are best taken with a still camera. The advantage of your cine camera is that it will record movement, so be sure to use it fully for that purpose. The funny side of picnics, bathing, cruising, beach games and amusements is the stuff of which your best holiday films will be made.

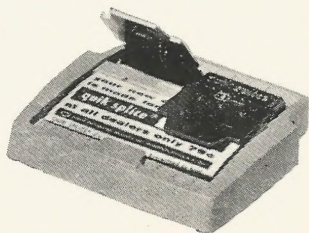
WEDDING FILMS. Let me repeat, don't shoot the conventional posed pictures which the still photographer is obliged to take. Get movement into it—the last-minute preparations, family reactions, etc., short bursts lasting 4-6 seconds. Follow with arrival at the church, people going in. Permission must be obtained before attempting to film inside a church, but many clergy will co-operate, provided you promise to act quite unobtrusively. After you record the wedding breakfast fun and ceremony of cutting the cake, finish with the send-off when the couple drive away, and you can fade-out your film with the car slowly vanishing into the distance.

A good wedding film should not exceed 10-15 minutes. Keep the scenes short and mix-in lots of close-ups-

SCRIPTED FILMS. This booklet is intended mainly for beginners in movie-making and, although you may eventually "have a go" at producing a film round a story, with your friends as actors all working to a carefully planned script, I advise you, at least for several months, to confine yourself to the more spontaneous type of movie such as I have mentioned above. If you are interested in filming short plays there is an extensive literature on the subject, while numerous clubs and societies can help you in this fascinating pursuit of amateur film making. A subscription to the magazine "Amateur Cine World" is a worthwhile investment.

FINISHING THE FILM. After you have shot enough footage on a subject, the developed film has to be critically inspected, all useless footage cut out, and the material re-assembled in such an order that it is presented in the most attractive manner. This process is called editing the film.

To make a long film needs considerable skill, and I suggest that you keep your very first attempts down to say 100 ft.



Film splicing is simple with suitable equipment such as this "quik splice," using sprocketed Mylar tape joints.

Examination of your material can be done with a hand viewer, but various editing devices are obtainable. Animated editing machines, of which several excellent types are available, pass the film through an illuminated viewer,

do's and don'ts

Always load and unload your camera in the shade.

Make sure the film you use is 'within date.'

Have your motor fully wound at all times.

Keep your lens and interior of camera clean.

Don't guess distance when using close-up lenses.

Make short sequences as a general rule.

Don't overdo the far-distant shots.

Keep most of your close-ups down to 6-8 secs.

Don't try hand-held panning when using a telephoto lens.

Always fade your titles in and out.

Don't forget bounce light require 2 stops larger.

With colour film stick to medium and close-up shots.

Get humour into your holiday films. Don't make them a series of "picture post-card" scenes.

Shoot lavishly but edit ruthlessly.

Edit your first film down to no more than 100 ft.

Always have a spare projection lamp in reserve.

like a miniature projector. First eliminate all the scenes that are blurred or badly exposed. Then ruthlessly cut all scenes to include just enough to tell the incident, finally re-arranging the scenes in proper sequence. The pieces of film are then spliced or joined with film cement. Numerous varieties of splicers can be bought, which make the operation quite simple.

When your film has been put together in this way you will have to add the main title, and also a number of sub-titles throughout the length of the film, which are necessary to link successive scenes together. Titling must be neat and, if you cannot draw your titles on cards, one of the best arrangements consists of a set of magnetic letters which adhere as placed on a black rectangle. The white wording on the black background is then shot, using a close-up supplementary lens. Here again a great number of complete titlers are on the market, all of which make the job very easy.

A makeshift titling arrangement I have used occasionally for films of children is an ordinary black-board supported on an easel, on which the sub-titles are boldly chalked.

PROJECTION. Showing your film on the screen is the final objective of your labours, yet it is surprising how many amateurs pay far too little attention to the details of projection which make or mar success.

If you are going to buy your projector from Dixons, tell us all about your proposed projection arrangements, size of room, shape, and probable size of audience, and we will gladly give you accurate advice based upon long experience.

Don't forget to clean the film path of your projector after each

show and follow implicitly the manufacturer's instructions regarding lubrication. And, by the way, on no account omit to keep a spare projector lamp in reserve. Nothing is more mortifying than to assemble your party of viewers and then have to disappoint everybody because you blow a lamp and are caught without a replacement.

CHOOSING A SCREEN. A good picture deserves the best possible showing you can give it, so please don't imagine that you can "make do" with a white wall or any makeshift arrangement. The properly made roll-up article, on a rigid support, gives incomparably better results and really is essential.

While the size of screen you need obviously is governed by the distance between projector and screen, there are practical limitations imposed by the use of 8 mm. film. Even if your projector will give a bigger picture, I advise you, when working in 8 mm., to be satisfied with a picture no more than 4 feet wide.

Two principal types of screens are available, one with a white matt

surface, and the other with a beaded surface. A matt screen reflects light more evenly over a wide area, so that in the comparatively rare case of a room in which the viewers must be disposed more or less in a line facing the screen, this type is preferable because of its non-directional properties.

The beaded screen, however, is the best general choice. It reflects more light than the matt screen, but in a narrower field. Therefore, if you can arrange a small group of viewers, say ten, in three rows facing a beaded screen, they will all see the brightest picture possible with the projector in use.

GOOD LUCK. My final advice is to take your cine camera with you whenever there is a likelihood of getting a few of those interesting, characteristic, unpremeditated angles of family life which you will treasure so dearly in years to come. Shoot lavishly, but edit ruthlessly. Keep your sequences short. Concentrate mainly on close-up, revealing shots, and assuredly your cine camera will prove an ever-increasing pleasure to yourself and others.

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show this unique service to be widely appreciated.

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